IN THE CLAIMS:

1. (Previously Presented) A reinforced rigid anode monolith and fuel produced by the process comprising:

providing a solution of organic aerogel or xerogel precursors including at least one of a phenolic resin, phenol (hydroxybenzene), resorcinol(1, 3-dihydroxybenzene), or catechol(1,2-dihydroxybenzene); at least one aldehyde compound selected from the group consisting of formaldehyde, acetaldehyde, and furfuraldehyde; and a transition metal oxide catalyst;

adding internal reinforcement materials selected from (1) ceramic materials; (2) glassy materials based on borates, phosphates, or silicates with alkaline earth or transition metal cations; and/or (3) carbon materials to said precursor solution to form a precursor mixture;

gelling said precursor mixture to form a composite gel;

drying said composite gel; and

pyrolyzing said composite gel to form an aerogel/carbon composite or a xerogel/carbon composite wherein said composites comprise chars and said internal reinforcement materials, and said chars are fuel capable of being combusted in a molten salt electrochemical fuel cell in the range from 500 C to 800 C to produce electrical energy.

2. (Previously Presented) The monolith recited in claim 1, wherein said drying is accomplished by supercritical-critical solvent extraction.

3. (Previously Presented) The monolith recited in claim 1, wherein said drying is accomplished by air drying.

4. (Previously Presented) The monolith recited in claim 1, wherein said ceramic materials are selected from the group consisting of silica, aluminosilicates, and ash derived from coal or petroleum clays.

5. (Previously Presented) The monolith recited in claim 1, wherein said carbon materials are selected from the group consisting of carbon fibers, carbon paper, carbon rods, carbon fabrics, carbon screens, graphite or highly graphitized carbon structures.

6.-11. (Cancelled)

12. (Previously Presented) The monolith recited in claim 1 wherein said composites have a density of at least 0.56 grams/cm3.

13. (Previously Presented) The monolith recited in claim 5 wherein said carbon materials comprise graphite.

14. (Previously Presented) The monolith recited in claim 1 wherein the pyrolizing is conducted in the presence of a material selected from the group consisting of alkali carbonate, alkaline earth carbonate or phosphoric acid, halide salts, and salts based on sodium aluminum hexafluoride.

15. (Previously Presented) A reinforced rigid anode monolith and fuel produced by the process comprising:

providing a solution of organic aerogel or xerogel precursors including at least one of a phenolic resin, phenol (hydroxybenzene), resorcinol(1,3-

dihydroxybenzene), or catechol(1,2-dihydroxybenzene); at least one aldehyde compound selected from the group consisting of formaldehyde, acetaldehyde, and furfuraldehyde; and an alkali carbonate or phosphoric acid catalyst;

adding internal reinforcement materials comprising carbon to said precursor solution to form a precursor mixture;

gelling said precursor mixture to form a composite gel;

drying said composite gel; and

pyrolyzing said composite gel to form a wettable aerogel/carbon composite or a wettable xerogel/carbon composite, wherein said composites comprise chars and said internal reinforcement materials, and wherein said composite is suitable for use as an anode with the chars being fuel capable of being combusted in a molten salt electrochemical fuel cell in the range from 500 C to 800 C to produce electrical energy.

16. (Previously Presented) The monolith recited in claim 15 wherein a mole ratio of said phenolic resin, resorcinol or catechol to said catalyst is less than about 50 to 1.

17. (Previously Presented) The monolith recited in claim 15 wherein a mole ratio of said resorcinol to said catalyst is less than or about 50 to 1.

18. (Previously Presented) The monolith recited in claim 15 wherein said composites have a density of at least 0.56 grams/cm3.

19. (Previously Presented) The monolith recited in claim 15 wherein said internal reinforcement materials comprise graphite.

20. (Previously Presented) The monolith recited in claim 15 wherein carbon dioxide is unable to percolate through the interior of said xerogel/carbon composite.

21. (Previously Presented) The monolith recited in claim 15 wherein the pyrolizing forms a xerogel/carbon composite.

22. (Previously Presented) A reinforced xerogel/carbon composite produced by a process comprising:

providing a solution of organic xerogel precursors including at least one of a phenolic resin, phenol (hydroxybenzene), resorcinol(1, 3-dihydroxybenzene), or catechol(1,2-dihydroxybenzene); and at least one aldehyde compound;

adding internal reinforcement materials selected from (1) ceramic materials; (2) glassy materials based on borates, phosphates, or silicates with alkaline earth or transition metal cations; and/or (3) carbon materials to said precursor solution to form a precursor mixture;

gelling said precursor mixture to form a composite gel;

drying said composite gel; and

pyrolyzing said composite gel to form a xerogel/carbon composite comprising chars and the internal reinforcement materials,

wherein said chars are fuel capable of being combusted in a molten salt electrochemical fuel cell to produce electrical energy.

23. (Previously Presented) The monolith recited in claim 22, wherein the at least one aldehyde compound is selected from the group consisting of formaldehyde, acetaldehyde, and furfuraldehyde.

24. (Previously Presented) The monolith recited in claim 1, wherein pyrolyzing said composite gel forms a wettable aerogel/carbon composite or a wettable xerogel/carbon composite.